

*Please provide the following information, and submit to the NOAA DM Plan Repository.*

**Reference to Master DM Plan (if applicable)**

*As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.*

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

**1. General Description of Data to be Managed****1.1. Name of the Data, data collection Project, or data-producing Program:**

North Carolina 2016 ESI Lines

**1.2. Summary description of the data:**

This data set contains vector lines representing coastal habitats of North Carolina, classified by their susceptibility to oiling. The Environmental Sensitivity Index (ESI) classification system, developed by NOAA, considers several natural and biological factors when ranking an intertidal range's sensitivity and persistence of oil impacts. As a whole, the ESI data characterize the marine and coastal environments and wildlife by their sensitivity to spilled oil, and include information for three main components: shoreline habitats, sensitive biological resources, and human-use resources. See also the ESIP (ESI Shoreline Polygons) data layer for additional information about shorelines and intertidal habitats.

**1.3. Is this a one-time data collection, or an ongoing series of measurements?**

One-time data collection

**1.4. Actual or planned temporal coverage of the data:**

2014 to 2016

**1.5. Actual or planned geographic coverage of the data:**

W: -78.6308, E: -75.2142, N: 36.5819, S: 33.6182

This reflects the extent of all land and water features included in the overall North Carolina ESI study region. The bounding box for this particular feature class may vary depending on occurrences identified and mapped.

**1.6. Type(s) of data:**

*(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)*  
Map (digital)

**1.7. Data collection method(s):**

*(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)*

**1.8. If data are from a NOAA Observing System of Record, indicate name of system:****1.8.1. If data are from another observing system, please specify:****2. Point of Contact for this Data Management Plan (author or maintainer)****2.1. Name:**

ESI Program Manager

**2.2. Title:**

Metadata Contact

**2.3. Affiliation or facility:****2.4. E-mail address:**

orr.esi@noaa.gov

**2.5. Phone number:****3. Responsible Party for Data Management**

*Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.*

**3.1. Name:**

ESI Program Manager

**3.2. Title:**

Data Steward

**4. Resources**

*Programs must identify resources within their own budget for managing the data they produce.*

**4.1. Have resources for management of these data been identified?****4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):****5. Data Lineage and Quality**

*NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.*

**5.1. Processing workflow of the data from collection or acquisition to making it publicly**

**accessible**

*(describe or provide URL of description):*

**Process Steps:**

- 2016-01-01 00:00:00 - The shoreline locations and features were derived from the integration of the following digital data: National Oceanic and Atmospheric Administration (NOAA) Continually Updated Shoreline Product (CUSP) (2014); NOAA Shoreline Mapping Program NC1401A / NC0801A / NC0801D / NC0902 / NC0503 / NC0501 (20140604) datasets; the North Carolina Division of Coastal Management (DCM) Estuarine Shoreline (1:300/1:500) (2012) dataset; the U.S. Geological Survey (USGS) National Hydrography Dataset (NHD) (2014); the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) dataset (2010); the NOAA, National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division(ERD) and U.S. EPA, Department of Homeland Security (DHS), U.S. Coast Guard (USCG) Sensitivity of Coastal Environments and Wildlife to Spilled Oil - North Carolina (201107) dataset; and manual digitization at approximately 1:1,000 scale using ortho-rectified aerial imagery resources from the North Carolina Center for Geographic Information and Analysis (2012), Environmental System Research Institute (ESRI) World Imagery (2014), and the NOAA Ortho-rectified Mosaic of Eastern Coastline - Hurricane Sandy Impact Area (20141023). See the Lineage section for additional information on the type of source data for this data layer. To create the base ESIL data layer, the vector datasets were compiled together in a file geodatabase feature class with the input data prioritized by currency and scale. The vector source data for each ESIL feature were recorded in the [SOURCE\_ID] field in the attribute table. The physiographic environment recorded in the [ENVIR] field was determined using the NWI dataset. The feature topology was checked for dangles and overlap before manual clean-up, segmentation, and classification of the shoreline began. Manual digitization efforts consisted of heads-up digitization at approximately 1:1,000 scale using the ortho-rectified aerial imagery (prioritized by currency, spectral resolution, and tidal coordination where available) which were recorded in the [ESI\_SOURCE] field of the ESIL layer. Specific tasks included editing the ESIL shoreline to be coincident with that in the imagery and digitizing missed or incomplete shoreline features, including islands, piers, groins, breakwaters, etc. Shoreline features of 10 meters (m) or greater in length were then segmented and classified. Where necessary, multiple ESI types were described for each shoreline segment. A field survey was conducted to ground-truth select photo-interpreted features and to capture photographs of particular ESI shoreline types. After the initial shoreline classification, the data were checked for logical consistency errors and re-checked for topology errors. The ESI, biology, and human-use data were compiled into the standard ESI digital data format. A QA/QC period for NOAA and participating resource experts was conducted and, as needed, edits to the ESIL data layer were made based on the recommendations of the experts, and final hardcopy maps and digital data were created.

**5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:**

**5.2. Quality control procedures employed (describe or provide URL of description):**

## **6. Data Documentation**

*The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.*

**6.1. Does metadata comply with EDMC Data Documentation directive?**

No

**6.1.1. If metadata are non-existent or non-compliant, please explain:**

Missing/invalid information:

- 1.7. Data collection method(s)
- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management
- 5.2. Quality control procedures employed
- 7.1. Do these data comply with the Data Access directive?
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.1.2. If there are limitations to data access, describe how data are protected
- 7.2. Name of organization of facility providing data access
- 7.2.1. If data hosting service is needed, please indicate
- 7.4. Approximate delay between data collection and dissemination
- 8.1. Actual or planned long-term data archive location
- 8.3. Approximate delay between data collection and submission to an archive facility
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

**6.2. Name of organization or facility providing metadata hosting:**

NMFS Office of Science and Technology

**6.2.1. If service is needed for metadata hosting, please indicate:**

**6.3. URL of metadata folder or data catalog, if known:**

<https://www.fisheries.noaa.gov/inport/item/47521>

**6.4. Process for producing and maintaining metadata**

*(describe or provide URL of description):*

Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: [https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC\\_PD-](https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-)

Data\_Documentation\_v1.pdf

## 7. Data Access

*NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.*

### 7.1. Do these data comply with the Data Access directive?

**7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?**

**7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:**

### 7.2. Name of organization of facility providing data access:

**7.2.1. If data hosting service is needed, please indicate:**

**7.2.2. URL of data access service, if known:**

[https://response.restoration.noaa.gov/esi\\_download](https://response.restoration.noaa.gov/esi_download)

### 7.3. Data access methods or services offered:

Data can be accessed by downloading the zipped ArcGIS geodatabase from the Download URL (see Distribution Information). Questions can be directed to the ESI Program Manager (Point Of Contact).

### 7.4. Approximate delay between data collection and dissemination:

**7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:**

## 8. Data Preservation and Protection

*The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.*

### 8.1. Actual or planned long-term data archive location:

*(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To*

*Be Determined, Unable to Archive, or No Archiving Intended)*

**8.1.1. If World Data Center or Other, specify:**

**8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:**

**8.2. Data storage facility prior to being sent to an archive facility (if any):**

Office of Response and Restoration - Seattle, WA

**8.3. Approximate delay between data collection and submission to an archive facility:**

**8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?**

*Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection*

## **9. Additional Line Office or Staff Office Questions**

*Line and Staff Offices may extend this template by inserting additional questions in this section.*